

1. A system for determining the cost of insurance related to the operation of a motor vehicle associated with a party, the system comprising:

- a device for obtaining and recording operational characteristics and operator actions relating to a level of risk applicable to the motor vehicle;
- a means for the party associated with the motor vehicle to review the recorded information in conjunction with information indicating how the recorded information would affect the cost of insurance;
- a means for the party associated with the motor vehicle to selectively control whether to submit the recorded information to an insurer;
- a means for the party associated with the motor vehicle to submit the recorded information to the insurer, if the party elects to do so;
- a means for assigning a risk level based in part on the recorded information;

and

- a means for determining a cost of insurance for the motor vehicle based on the assigned risk level.

2. The system of claim 1 wherein the device for obtaining and recording operational characteristics and operator actions comprises:

- a removable device for obtaining and recording operational characteristics and operator actions relating to a level of risk applicable to the motor vehicle.

3. The system of claim 2 wherein the removable device comprises:

- a connector for temporarily mating with a connector associated with at least one electronic device of the motor vehicle.

4. The system of claim 3 wherein the connector comprises:

- an on board diagnostic connector for temporarily mating with an on board diagnostic connector of the motor vehicle.

5. The system of claim 1 wherein the means for the party associated with the motor vehicle to review the recorded information comprises:

- a display program for a personal computer, the display program and personal computer being operative to receive data from the device, analyze the received data to

identify data that indicates risky or safe behavior related to the operation of the motor vehicle, and if identified, display a summary of the identified portion of the data in conjunction with information indicating how the driving behavior would affect the cost of insurance.

6. The system of claim 1 wherein the means for the party associated with the motor vehicle to submit the recorded information to the insurer, if the party elects to do so comprises:

a display program for a personal computer, the display program and computer being operative to receive data from the device and allow the party to review the data in conjunction with information regarding any effect providing the data to the insurer would have on the cost of insurance and being operative to transmit the data to a computational platform of the insurer if directed to do so by the party.

7. A method for reviewing operational data collected from a motor vehicle and determining how that data affects the cost of insuring the motor vehicle, the method comprising:

providing a means for obtaining and recording information regarding one or more aspects of motor vehicle operation; and

providing a means for a party associated with the motor vehicle to review the recorded information in conjunction with information regarding at least one risk factor and indicating how the recorded information, if provided to an insurer, would affect the cost of insurance.

8. The method of claim 7 wherein providing the means for obtaining and recording comprises:

providing a data logger that is operative to record at least one of vehicle speed, vehicle acceleration, vehicle deceleration, turn signal usage, seat belt usage, time of day, date, location, operator identity, vehicle identity, and vehicle mileage information regarding the operation of the motor vehicle.

9. The method of claim 7 wherein providing means for obtaining and recording information comprises:

providing a data logger that is operative to connect to an on board diagnostic

connector of the motor vehicle.

10. The method of claim 7 wherein providing the means for the party associated with the motor vehicle to review the recorded information comprises:

providing a display device that is operative to display vehicle speed information in conjunction with information indicating how the speed at which the motor vehicle is driven affects the cost of insurance.

11. The method of claim 7 wherein providing the means for the party associated with the motor vehicle to review the recorded information comprises:

providing a display device that is operative to display at least one of vehicle acceleration and deceleration information in conjunction with information indicating how at least one of accelerations and decelerations at which the motor vehicle is driven affects the cost of insurance.

12. The method of claim 7 wherein providing the means for the party associated with the motor vehicle to review the recorded information comprises:

providing a display device that is operative to display at least one of turn signal usage and seat belt usage information related to the operation of the vehicle in conjunction with information indicating how at least one of turn signal usage and seat belt usage associated with the operation of the motor vehicle affects the cost of insurances.

13. The method of claim 7 wherein providing the means for the party associated with the motor vehicle to review the recorded information comprises:

providing a display device that is operative to display at least one of time of day, date, location, and vehicle mileage information related to the operation of the vehicle in conjunction with information indicating how at least one of the time of day, date, location and distance the motor vehicle is driven affects the cost of insurance.

14. The method of claim 7 wherein providing the means for the party associated with the motor vehicle to review the recorded information comprises:

providing software to be run on a personal computational platform, the software and computational platform being operative to receive a copy of the recorded

information from the data logger and display at least a portion of the recorded information in conjunction with information regarding at least one risk factor, and indicating how the recorded information, if provided to an insurer, would affect the cost of insurance.

15. The method of claim 14 wherein providing a means for a party associated with the motor vehicle to review the recorded information further comprises:

providing a server associated with the insurer, the server being operative to receive a copy of at least a portion of the recorded information from the personal computational platform, display at least a portion of the received information on a Web page and allow a Web site visitor to change the displayed data, the server being further operative to analyze the changed data and calculate and display information related to a cost of insurance based on the changed data.

16. The method of claim 14 wherein providing software further comprises:  
providing software that is operative to transmit a copy of the recorded information to the server if and only if directed to do so by the party.

17. A system for analyzing the operational actions and behavior of a motor vehicle operator, the system comprising:

a data logger that is operative to record information regarding at least one aspect of motor vehicle operation; and

a display device that is operative to receive a copy of the recorded information from the data logger and display at least a portion of the recorded information in conjunction with information regarding at least one risk factor and indicating how the recorded information, if provided to an insurer, would affect the cost of insurance.

18. The system of claim 17 wherein the data logger is operative to record at least one of vehicle speed, vehicle acceleration, vehicle deceleration, turn signal usage, seat belt usage, time of day, date, location, operator identity, vehicle identity, and vehicle mileage information regarding the operation of the motor vehicle.

19. The system of claim 17 wherein the display device is operative to display vehicle speed information in conjunction with information indicating how the speed at which

the motor vehicle is driven affects the cost of insurance.

20. The system of claim 17 wherein the display device is operative to display at least one of vehicle acceleration and deceleration information in conjunction with information indicating how at least one of accelerations and decelerations at which the motor vehicle is driven affects the cost of insurance.

21. The system of claim 17 wherein the display device is operative to display at least one of turn signal usage and seat belt usage information related to the operation of the vehicle in conjunction with information indicating how the at least one of turn signal usage and seat belt usage associated with the operation of the motor vehicle affects the cost of insurance.

22. The system of claim 17 wherein the display device is operative to display at least one of time of day, date, location, and vehicle mileage information related to the operation of the vehicle in conjunction with information indicating how the at least one of the times of day, days of the week, location and distance the motor vehicle is driven affects the cost of insurance.

23. The system of claim 17 wherein the display device comprises:  
a personal computational platform of a party responsible for the motor vehicle;  
and

software run on the personal computational platform, the software and computational platform being operative to receive a copy of the recorded information from the data logger and display at least a portion of the received information in conjunction with information regarding at least one risk factor and indicating how the recorded information, if provided to an insurer, would affect the cost of insurance.

24. The system of claim 23 wherein the display device further comprises:  
a server associated with an insurer, the server being operative to receive a copy of at least a portion of the recorded information from the personal computational platform, display at least a portion of the received information on a Web page and allow a Web site user to change the displayed data, the server being further operative to analyze the

changed data and calculate and display a cost of insurance based on the changed data.

25. The system of claim 23 wherein the software is further operative to transmit a copy of the recorded information to the server if and only if directed to do so by the party responsible for the motor vehicle.

26. A method for analyzing how a cost of insurance would be affected by altering the operation actions and behavior of an operator of a motor vehicle, the method comprising:  
providing a means for entering information regarding at least one aspect of the operation of the motor vehicle;

providing a means to display the entered information regarding the at least one aspect of motor vehicle operation in conjunction with information related to how the entered information would affect the cost of insurance; and

providing a means to manipulate the displayed information in conjunction with information on how modifying operation of the motor vehicle would affect the cost of insurance.

27. The method of claim 26 wherein providing the means for entering information regarding at least one aspect of the operation of the motor vehicle comprises:

providing a device that is operative to communicate with a network of a motor vehicle and record information regarding the operation of the motor vehicle received from the network and to deliver the recorded information to the means of displaying the recorded information.

28. The method of claim 27 wherein providing the device that is operative to communicate with a network of a motor vehicle comprises:

providing a device that communicates with the network of the motor vehicle through an on board diagnostic connector of the motor vehicle.

29. The method of claim 26 wherein providing the means for entering information regarding at least one aspect of the operation of the motor vehicle comprises:

providing an operator interface for facilitating communication between an operator and the means to display the entered information.

30. The method of claim 26 wherein providing the means for entering information regarding at least one aspect of the operation of the motor vehicle and providing the means to display the entered comprises:

providing a means for recording information regarding the at least one aspect of the operation of the motor vehicle; and

providing a means to display the recorded information regarding the at least one aspect of motor vehicle operation in conjunction with information related to how the entered information would affect the cost of insurance.

31. The method of claim 30 wherein providing the means to display the recorded information regarding the at least one aspect of motor vehicle operation in conjunction with information related to how the recorded information would affect the cost of insurance comprises:

providing display software for a computational platform of the operator, the display software being operative to receive recorded information regarding the operation of the motor vehicle from the means for recording information, analyze the received information to determine at least one rating factor based on the received information and to display at least a summary of the received information in conjunction with the at least one rating factor.

32. The method of claim 31 wherein providing display software for a computational platform of the operator, the display software being operative to receive recorded information regarding the operation of the motor vehicle from the means for recording information, analyze the received information to determine at least one risk rating based on the received information comprises:

providing display software for a computational platform of the operator, the display software being operative to receive recorded information regarding the operation of the motor vehicle from the means for recording information, analyze the received information to determine a safety score.

33. The method of claim 31 wherein providing display software for a computational platform of the operator, the display software being operative to receive recorded information regarding the operation of the motor vehicle from the means for

recording information, analyze the received information to determine at least one risk rating based on the received information comprises:

providing display software for a computational platform of the operator, the display software being operative to receive recorded information regarding the operation of the motor vehicle from the means for recording information, analyze the received information to determine at least one mileage adjustment.

34. The method of claim 26 wherein providing the means to manipulate the displayed information comprises:

providing display software that is operative to receive the entered information regarding the operation of the motor vehicle, present the received information in conjunction with risk rating information, provide a means to change the displayed information regarding the operation of the motor vehicle and to recalculate and display updated risk rating information based on the changed display information.

35. The method of claim 26 wherein providing the means to manipulate the displayed information comprises:

providing display software that is operative to receive the entered information regarding the operation of the motor vehicle, present the received information in conjunction with insurance cost information, provide a means to change the displayed information regarding the operation of the motor vehicle and to recalculate and display updated insurance cost information based on the changed display information.

36. The method of claim 34 wherein providing display software that is operative to receive entered information regarding the operation of the motor vehicle, present the received information in conjunction with risk rating information, provide a means to change the displayed information regarding the operation of the motor vehicle and to recalculate and display updated risk information based on the changed display information comprises:

providing a Web page server including software that is operative to receive the entered information regarding the operation of the motor vehicle, present the received information in conjunction with insurance cost information to the operator via a Web page, provide a means for the operator to change the displayed information regarding the operation of the motor vehicle and to recalculate and display on the Web page updated insurance cost



information, based on the changed display information, to the operator.

37. The method of claim 35 wherein providing display software that is operative to receive entered information regarding the operation of the motor vehicle, present the received information in conjunction with risk rating information, provide a means to change the displayed information regarding the operation of the motor vehicle and to recalculate and display updated risk information based on the changed display information comprises:

providing a Web page server including software that is operative to receive the entered information regarding the operation of the motor vehicle, present the received information in conjunction with risk rating information to the operator via a Web page, provide a means for the operator to change the displayed information regarding the operation of the motor vehicle and to recalculate and display on the Web page updated risk information, based on the changed display information, to the operator.

38. A method for comparing the operational characteristics of a motor vehicle operator with the operational characteristics of operators of other motor vehicles, the method comprising:

providing a means for recording one or more aspects of the operation of the motor vehicle by the operator;

providing a means for the operator to review recorded information regarding at least one aspect of motor vehicle operation by the operator in conjunction with information related to the operation of other motor vehicles.

39. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding a time of day the motor vehicle was operated by the operator in conjunction with information related to the time of day other motor vehicles are operated.

40. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding a speed the motor vehicle was operated by the operator in conjunction with information related

to the speed other motor vehicles are operated.

41. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding accelerations at which the motor vehicle was operated by the operator in conjunction with information related to accelerations at which other motor vehicles are operated.

42. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding decelerations at which the motor vehicle was operated by the operator in conjunction with information related to decelerations at which other motor vehicles are operated.

43. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding seatbelt usage while the motor vehicle was operated by the operator in conjunction with information related to seat belt usage when other motor vehicles are operated.

44. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a means for the operator to review recorded information regarding turn signal usage while the motor vehicle was operated by the operator in conjunction with information related to turn signal usage when other motor vehicles are operated.

45. The method of claim 38 wherein providing the means for the operator to review the recorded information comprises:

providing a Web page for the operator to review recorded information regarding at least one aspect of motor vehicle operation by the operator in conjunction with information related to the operation of other motor vehicles.

46. A method of determining a cost of insurance related to the operation of a

machine associated with a party, the method comprising:

offering a device for recording at least one aspect of the operation of the machine; and

determining the cost of insurance based at least in part on actions taken by the party related to the use of the device after the device is offered.

47. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the party requesting the offered device.

48. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the party accepting the offered device.

49. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the party allowing the offered device to record the at least one aspect of the operation of the machine .

50. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the party reviewing information recorded by the device.

51. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the party transmitting information recorded by the offered device to an insurer.

52. The method of claim 46 wherein determining the cost of insurance based at least in part on actions taken by the party comprises:

determining the cost of insurance based at least in part on the content of information recorded in the device and transmitted to an insurer by the party.

53. A device for recording at least one aspect of machine operation and transmitting the information to a computational platform, the device comprising:

- a processor;
- a log;
- a clock;
- a machine interface;
- a computational platform interface; and
- a program storage including instructions for directing the processor to receive information from a component of the machine through the machine interface, store the information in the log in association with time information from the clock, at least some of the information being stored in an encrypted form, and transmit at least the encrypted information to the computational platform.

54. The device of claim 53 wherein the machine interface includes a connector for mating with an on board diagnostic connector of a vehicle.

55. The device of claim 54 wherein the on board diagnostic includes a connector for mating with at least one of an OBDI connector of a vehicle, an OBDII connector of a vehicle, an OBDIII connector of a vehicle and an SAE J-1962 connector of a vehicle.

56. The device of claim 53 wherein the computational platform interface includes a connector for mating with at least one of an RS-232 cable from a serial communication port of the computational platform, a Universal Serial Bus (USB) cable associated with a serial communication port of the computational platform, and a parallel port cable associated with a parallel communication port of the computational platform.

57. The device of claim 53 wherein the computational platform interface includes a connector for mating with at least one of an RS-232 port of the computational platform, a Universal Serial Bus (USB) port of the computational platform and a parallel port of the computational platform.

58. The device of claim 53 wherein the program storage includes instructions for directing the processor to receive speed information from a component of the machine through the machine interface and store the information in the log in association with time information from the clock.

59. The device of claim 53 wherein the program storage includes instructions for directing the processor to receive speed information from a component of the machine through the machine interface, calculate an acceleration based on the speed information, compare the calculated acceleration to an acceleration threshold and store the acceleration in the log in association with time information from the clock and the speed information if the calculated acceleration is beyond the acceleration threshold.

60. The device of claim 53 wherein the program storage includes instructions for directing the processor to receive speed information from a component of the machine through the machine interface, calculate a deceleration based on the speed information, compare the calculated deceleration to a deceleration threshold and store the deceleration in the log in association with time information from the clock and the speed information if the calculate deceleration is beyond the deceleration threshold.

61. The device of claim 53 wherein the program storage includes further instructions for directing the processor to receive, through the machine interface, and store, at least one of: a vehicle identification number and a network communications protocol identification.

62. The device of claim 53 wherein the program storage includes further instructions for directing the processor to receive clock setting signals through the computational platform interface and to reset the clock based on the received clock setting signals.

63. The device of claim 53 further comprising a receiver associated with the clock, the receiver configured to receive clock setting signals transmitted by a time standards organization.

64. The device of claim 53 further comprising:  
a GPS receiver;  
wherein the program storage further includes instructions for directing the processor to receive and process signals from the GPS receiver to determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

65. The device of claim 53 further comprising:  
a GPS receiver interface for communicating with a GPS receiver that is external to the device;  
wherein the program storage further includes instructions for directing the processor to receive and process signals from the GPS receiver to determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

66. The device of claim 53 wherein the program storage further includes instructions for directing the processor to receive GPS signals from the at least one component through machine interface and process the GPS signals determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

67. The device of claim 53 wherein the machine interface includes a wireless communications device for communicating with a wireless communications device of a vehicle.

68. The device of claim 53 wherein the computational platform interface includes a wireless communications device for communication with a wireless communications device of the computational platform.

69. The device of claim 53 wherein the computational platform interface comprises a removable storage element comprising the log and a removable storage element reader associated with the computational platform.

70. The device of claim 53 wherein the program storage includes instructions for directing the processor to receive instructions over the computational platform interface and store the new instruction in the program storage.

71. A device for recording at least one aspect of machine operation and transmitting the information to a computational platform, the device comprising:

- a processor;

- a log;

- a clock;

- a machine interface;

- a computational platform interface; and

- a program storage including instructions directing the processor to receive speed information from a component of the machine through the machine interface, calculate an acceleration or deceleration based on the speed information, compare the calculated acceleration or deceleration to an acceleration or deceleration threshold and store the acceleration or deceleration in the log in association with time information from the clock and the speed information if the calculated acceleration or deceleration is beyond the acceleration or deceleration threshold.

72. The device of claim 71 wherein the machine interface includes a connector for mating with an on board diagnostic connector of a vehicle.

73. The device of claim 71 wherein the machine interface includes a connector for mating with at least one of an OBDI connector of a vehicle, an OBDII connector of a vehicle, an OBDIII connector of a vehicle and an SAE J-1962 connector of a vehicle.

74. The device of claim 71 wherein the computational platform interface includes a connector for mating with at least one of an RS-232 cable from a serial communication port of the computational platform, a Universal Serial Bus (USB) cable

associated with a serial communication port of the computational platform and a parallel communication port of the computational platform.

75. The device of claim 71 wherein the computational platform interface includes a connector for mating with at least one of an RS-232 port of the computational platform a Universal Serial Bus (USB) port of the computational platform and a parallel port of the computational platform.

76. The device of claim 71 wherein the computational platform interface comprises a removable storage element comprising the log and a removable storage element reader associated with the computational platform.

77. The device of claim 71 wherein the program storage includes instructions for directing the processor to receive speed information from a component of the machine through the machine interface, store the information in the log in association with time information from the clock.

78. The device of claim 71 wherein the program storage includes instructions for directing the processor to store the speed, acceleration and/or deceleration information in the log in association with time information from the clock, at least some of the information being stored in an encrypted form, and transmit at least the encrypted information to the computational platform.

79. The device of claim 71 wherein the program storage includes further instructions for directing the processor to receive, through the machine interface, and store, at least one of: a vehicle identification number and a network communications protocol identification.

80. The device of claim 71 wherein the program storage includes further instructions for directing the processor to receive clock setting signals through the computational platform interface and to reset the clock based on the received clock setting signals.



81. The device of claim 71 further comprising a receiver associated with the clock, the receiver configured to receive clock setting signals transmitted by a time standards organization.

82. The device of claim 71 further comprising:  
a GPS receiver;  
wherein the program storage further includes instructions for directing the processor to receive and process signals from the GPS receiver to determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

83. The device of claim 71 further comprising:  
a GPS receiver interface for communicating with a GPS receiver that is external to the device;  
wherein the program storage further includes instructions for directing the processor to receive and process signals from the GPS receiver to determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

84. The device of claim 71 wherein the program storage further includes instructions for directing the processor to receive GPS signals from the at least one component through machine interface and process the GPS signals determine location information regarding the device and for storing the location information in the log in association with the time information and the information received from the component of the machine.

85. The device of claim 71 wherein the program storage includes instructions for directing the processor to receive instructions over the computational platform interface and store the new instruction in the program storage.